# **MA2D601**

# Silicon planar type

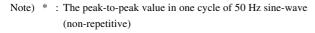
For high-frequency rectification
For Snubber circuit of power supplies
For secondary side rectification for a power supply

### ■ Features

- High reverse voltage  $V_R > 600 \text{ V}$
- Short reverse recovery time  $t_{rr} < 50$ nsec
- $\bullet$  TO-220D (Full-pack package) with high dielectric breakdown voltage > 5.0 kV

## ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	600	V
Non-repetitive peak reverse surge voltage	V <sub>RSM</sub>	600	V
Average forward current	I <sub>F(AV)</sub>	5.0	A
Non-repetitive peak forward surge current*	$I_{FSM}$	50	A
Junction temperature	$T_{j}$	-40 to +150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C



# Unit:mm 4.6±0.2 2.9±0.2 0.55±0.15 1:Cathode 2:Anode TO-220D-B1 Package

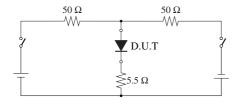
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

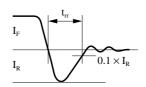
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Repetitive peak reverse current	I <sub>RRM1</sub>	$V_{RRM} = 600 \text{ V}, \ T_{C} = 25^{\circ}\text{C}$			100	μΑ
	I <sub>RRM2</sub>	$V_{RRM} = 600 \text{ V}, \ T_j = 150^{\circ}\text{C}$			500	μΑ
Forward voltage (DC)	$V_{\rm F}$	$I_F = 5.0 \text{ A}, \ T_C = 25^{\circ}\text{C}$			1.5	V
Reverse recovery time*	t <sub>rr</sub>	$I_F = 1 A, I_R = 1 A$			50	ns
Thermal resistance	R <sub>th(j-c)</sub>				3.0	°C/W
	R <sub>th(j-a)</sub>				63	°C/W

Note) 1. Rated input/output frequency: 10 MHz

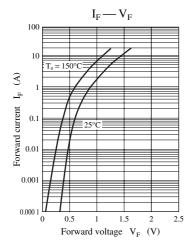
2. Tightening torque-max.  $8 \text{ kg} \times \text{cm}$ 

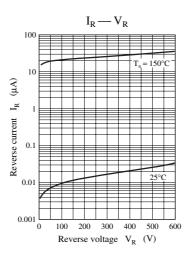
3. \*: t<sub>rr</sub> measuring circuit





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